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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,336	12/07/2000	Hiroaki Kubo	15162/02840	1459

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EXAMINER

HENN, TIMOTHY J

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/732,336

Applicant(s)

KUBO, HIROAKI

Examiner

Timothy J Henn

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-8 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushima (JP 08-254751 A) in view of Nishimura et al. (US 4,667,489).

[claim 1]

In regard to claim 1, note that Matsushima discloses a camera comprising: a taking lens (Figure 1, Item 13); an optical element, disposed retractably in an optical path from the taking lens to the image-sensing media, for reflecting part of the light from the taking lens (Figures 4 and 5, Item 21); a photometric device for measuring an amount of light reflected from the optical element (Figure 1, Item 7); a selector that selects either a first mode in which shooting is performed without emission of the illumination light by the illumination device and a second mode in which shooting is performed with emission of the illumination light by the illumination device (Figure 1, Item 5; Column 2, Paragraph 3; The office notes that the flash light emission control sends control signals to the flash which determine whether or not the flash is to be activated); and a driver that retracts the optical element out of the optical path during shooting when the first mode is selected and that keeps the optical element in the optical path during shooting when the second mode is selected (Figure 6; Column 11,

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Paragraph 3). Therefore, it can be seen that Matsushima lacks an image-sensing device for shooting an image by receiving light from the taking lens. However, it is well known in the photography art that conventional camera film can be replaced by an image sensor to form a digital camera that allows users to review images without the need for costly film development steps (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the camera of Matsushima a digital camera by including an imaging sensing device in order to allow users to review images without the need for costly film development steps. It can further be seen that Matsushima lacks a controller that, during shooting, makes an illumination device start emitting illumination light and then makes the illumination device stop emitting the illumination light when the amount of light measured by the photometric device has reached a predetermined value.

Nishimura et al. teaches a flash duration control system which measures the output of a photometric device and terminates a flash operation when the output of the photometric device exceeds a predetermined level (e.g. Column 4, Lines 30-49). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the flash duration control system of Nishimura et al. to “realize a high speed response characteristic of adjusting the flash exposure value to the brightness of the object” (Column 5, Lines 43-49).

[claim 2]

In regard to claim 2, note that the illumination device is externally connected to the camera of Matsushima (e.g. Column 2, Paragraph 3).

[claim 3]

In regard to claim 3, note that the optical element of Matsushima is a pellicle or "half" mirror (e.g. Abstract).

[claim 6]

In regard to claim 6, note that Matsushima discloses a viewfinder that offers a visible image by receiving the light reflected from the optical element (e.g. Figures 4 and 5).

[claim 7]

Claim 7 is a method claim corresponding to apparatus claim 1. Therefore, claim is analyzed and rejected as previously discussed with respect to claim 1.

3. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushima (JP 08-254751 A) in view of Nishimura et al. (US 4,667,489) as applied to claim 1 above, and in further view of Miyadera (US 5,550,587).

[claim 4]

In regard to claim 4, note that Matsushima in view of Nishimura et al. discloses a digital camera as claimed in claim 1. Therefore, it can be seen that Matsushima in view of Nishimura et al. lacks a gain controller that adjusts a gain of an output of the image sensing device in such a way that the gain differs between the first and second modes.

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Miyadera teaches a white balance system in which a gain is altered between a flashing mode and a non-flashing mode to enable proper white balance (e.g. Column 6, Lines 6-23). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the gain between the first and second modes of Matsushima in view of Nishimura et al. to output properly white balanced signals as taught by Miyadera.

[claim 8]

Claim 8 is a method claim corresponding to apparatus claim 4. Therefore, claim is analyzed and rejected as previously discussed with respect to claim 4.

Allowable Subject Matter

4. Claim 5 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

[claim 5]

In regard to claim 5, the prior art does not teach or fairly suggest a camera which sets a gain based on a reciprocal of the transmittance of an optical element in a flash photography mode.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art further shows the current state of the art in cameras with varying mirror control for different modes:

- | | | |
|------|------------------|----------------|
| i. | Higuchi | US 6,661,460 |
| ii. | Kubo et al. | US 6,536,960 |
| iii. | Sato | US 4,757,387 |
| iv. | Hideshima et al. | JP 08-266478 A |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J Henn whose telephone number is (703) 305-8327. The examiner can normally be reached on M-F 7:30 AM - 5:00 PM, alternate Fridays off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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TJH
6/10/2004


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